### "APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859120002-3

VAYNSHTEYN, B.Z., inzh.

Membrane actuators of traction devices for the rolling stock of electric railroads. Vest. TSNII MFS 25 no.1:9-13 '66. (MIRA 19:2)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859120002-3"

KHEYFEITS, Ye.B., inzh.; VAYNSHTEYN, B.Z., inzh.; GUDAVAD7E, G.G., inzh.; ZHITKOV, N.Ya., inzh.

New design of a reversing switch for electric rolling stock and diesel locomotives. Elektrotekhnika 35 no.11:11-12 N '64. (MIRA 18:6)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859120002-3"

VAYNSHTEYN, B.Z. (Tbilisi); VOL'F, A.M., kand. tekhn. nauk

Experimental study of the heating and cooling of the trection motors of main line electric locomotives. Elektrichestve no.10:85-86 0 164. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodo-rozhnogo transporta, Ural'skoye otdeleniye (for Vol'f).

VAYNSHTEYN, B.Z., inzh.

"Electric traction apparatus" by N.M. Balalov and B.P. Petrov. Reviewed by B.Z. Vainshtein. Elektrotekhnika 35 no.1:60-62 Ja '64.

CHUMBURIDZE, I.P. (Tbilisi); VAYNSHTEYN, B.Z. (Tbilisi)

Voltage unification in the circuit control of the rolling stock. Zhel.-dor.transp. 45 no.12:53-54 D \*63. (MIRA 17:2)

1. Direktor Tbilisskogo nauchno-issledovatel'skogo elektrotekhnicheskogo instituta (for Chumburidze). 2. Rukovoditel' laboratorii Tbilisskogo nauch-no-issledovatel'skogo elektrotekhnicheskogo instituta (for Vaynshteyn).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859120002-3"

AMIRAGOV, E.M.; VAYNSHTEYN, B.Z.

Diaphragm drives for the apparatus of the series VL8 electric locomotive. Elek. i tepl. tiaga 7 no.9:9-10 S \*63. (MIRA 16:10)

1. Glavnyy konstruktor Tbilisskogo elektrovozostroitel'nogo zavoda im. V.I.Lenina (for Amiragov). 2. Rukovoditel' laboratorii Nauchno-issledovatel'skogo elektrotekhnicheskogo instituta Soveta narodnogo khozyaystva Gruzinskoy SSR (for Vaynshteyn).

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### "APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859120002-3

MKHEIDZE, V.N., inzh.; VAYNSHTEYN, B.Z., inzh. Means for increasing the operational reliability of electrical equipment. Vest. ekeltroprom. 34 no.3:50-51 Mr '63. (MIRA 16:8)

(Electric industries-Quality control) (Electric machinery)

AND THE SECOND REPORTS AND SECOND SEC

BERDZENISHVILI, B.G.; VAYNSHTEYN. B.Z., ZHITKOV, N.Ya.; KUCHAVA, V.A.

Lightened pantograph for high-speed rolling stock. Elek. i topl. tinga 7 no.3:6-7 Mr '63. (MIRA 16:6)

1. Sotrudniki otdela elektricheskoy tyagi Nauchno-issledovatel skogo elektrotekhnicheskogo instituta Soveta narodnogo Khozyaystva Gruzinskoy SSR.

(Electric railroads-Wires and wiring)

BELYAYEV, Igor' Aleksandrovich; VAYNSHTEYN, Boris Zinov'yevich; VETROV, N.I., inzh., retsenzent; KALININ, V.K., kand. tekhn. nauk, red.; KHITROVA, N.A., tekhn. red.

[Mechanization of work and automation of systems in contacnetwork maintenance] Mekhanizatsiia rabot i avtomatizatsiia ustroistv na distantsiiakh kontaktnoi seti. Moskva, Transzheldorizdat, 1963. 84 p. (MIRA 16:5) (Electric railroads—Wires and wiring)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859120002-3"

VAYNSHTEYN, B.Z., inzh.

"High-voltage switch drives" by I.G.Koroviakovskii. Reviewed by B.Z.Vainshtenin. Elek.sta. 34 no.2:92 F '63. (MIRA 16:4) (Electric switchgear) (Koroviakovskii, I.G.)

VAYNSHTEYN, B.Z., inzh.; GUDAVADZE, G.G., inzh.; KHEYFITS, Ye.B., inzh.

Use of dispersed drives in electric traction machinery. Vest. elektroprom. 33 no.9:37-39 S '62. (MIRA 15:10) (Electric railway motors—Equipment and supplies)

# "APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859120002-3

VAYESHTEYN, B.Z.

Thirtieth anniversary of the electrification of railroad transportation in the Suram Pass. Elektrichestvo no. E:83-87 Ag '62.

(NIRA 15:7)

(Suram Range—Electric railroads)

VAYNSHTEYN, B.Z., inzh.; GUDAVADZE, G.G., inzh.; KHEYFITS, Ye.B., inzh.

Design and calculation of the group controllers of the rolling stock. Vest. TSNII MPS 21 no.1:15-19 '62. (MIRA 15:2)

1. Nauchno-issledovatel skiy elektrotekhnicheskiy institut, g. Tbilisi.

(Electric controllers)

BEZHANOV, V.G., inzh.; VINNIKOV, I.L., inzh.; VAYNSHTEYN, B.Z., inzh.

Study of the commutation of an electric traction machine with a laminated yoke operating with a pulsating potential. Vest. elektroprom. (MIRA 15:1)

31 no.10:13-15 0 '60.

(Electric railway motors) (Electric locomotives)

· 10. 在中华的一个中国人的特殊的特殊的

VAYNSHTEYN, B.Z., inzh.

Concerning the types of relay equipment used in signaling and automatic control systems. Energetik 9 no.11:10-11 N '61.

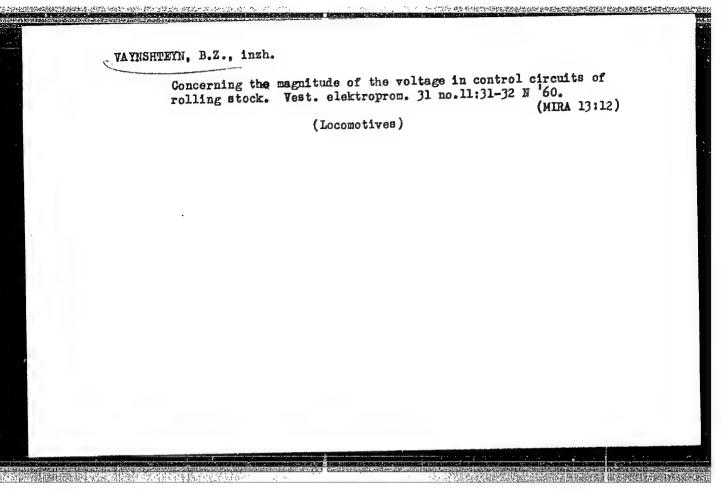
(Automatic control) (Electric relays)

VAYNSHTEYN, B.Z., inzh.

In regard to V.G. Vasil'ev's article "Decreasing the number of elements in lead-acid storage batteries at electric power plants." Elek. sta. 32 no. 5:93 My '61. (MIRA 14:5)

(Storage fatteries)
(Electric power plants Squipment and supplies)
(Vasil'ev, V.G.)

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### VAYNSHTKYN, B.Z.

How to prevent damages to frequency triplers. Elek.i tepl.tiaga 4 no.2:26 F '60. (MIRA 13:6)

 Rukovoditel' laboratorii Nauchno-issledovatel'skogo elektrotekhnicheskogo instituta sovnarkhoza Gruzinskoy SSR, g. Tbilisi. (Frequency changers)

VAYNSHTEYN, B.Z.

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Valuable textbook pertaining to the safety of working conditions. Prom.energ. 15 no.3:61-62 Mr '60. (MIRA 13:6)

Nauchno-issledovatel'skiy elektrotekhnicheskiy institut
 Soveta narodnogo khozyaystva GSSR.
 (Electric engineering—Safety measures)

VAYNSHTEYN, B.Z., inzh.

Measures for improving the operation of the UM frequency tripler. Prom.energ. 15 no.2:27 F '60. (MIRA 13:5)
(Electric railroads--Equipment and supplies)
(Frequency changers)

VAYNSHTEYN, B.Z., inzh.

Remote control of pole switches. Elekai tepla tiaga 5 no.10:22-23 0 fola (MIRA 14:10)

(Remote control)
(Electric railroads Switches)

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SOURCE CODE: UR/0232/65/000/010/0058/0061

AUTHOR: Vaynshteyn, B.Z. (Engineer)

ORG: None

TITLE: Repair and quality of electric equipment of electric locomotives

SOURCE: Zheleznodorozhnyy transport, no. 10, 1965, 58-61

TOPIC TAGS: locomotive, electric equipment,

reliability engineering

ABSTRACT: The author reports that in 1963 there was an incidence of equipment failure at the rate of 2.29 per one million kilometers of d-c electric locomotive runs, and 8.45 per one million km of a-c locomotive runs. The economic factors of the unreliability of equipment are discussed, the need for taking the repairability of equipment into consideration is stressed, and it is pointed out that the design of equipment which is not only reliable, but simple to install and to repair, yields considerable savings since increased repairability more than compensates for the extra costs involved in the initial outlay. A comparison is made between a-c locomotive and d-c locomotive equipment, and the components most likely to fail are discussed, as well as some of the causes of their failure. It is noted in conclusion that an analysis of the statistical data of accidents due to the electrical equipment of a-c and d-c locomotives, together with the development of a methodology of full-scale tests and speeded up studies of models of new equipment under difficult operating conditions will make it possible to develop equipment with the necessary degree of reliability and repairability. It is suggested that this

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VAYNSHTEYN, D.M., inzh.; DVOROKOVSKIY, G.I., inzh.; MAKIN, N.P., inzh.

Using polyethylene pipes for atuomatic control systems. Mont.i
spets.rab. v stroi. 24 no.12:11-12 D \*62. (MIRA 15:12)

(Pipe, Plastic) (Automatic control)

Landration of the companies of the compa

VAYNSHTEYN, Daniil Maksovich; ARKHIPOV, V.G., inzh., retsenzent; PESOSHNOV, M.N., inzh., retsenzent; DUGINA, N.A., tekhn. red.

[Installation of regulatory and automatic control devices]
Montazh priborov kontrolia i avtomaticheskogo regulirovaniia;
spravochnik. Moskva, Mashgiz, 1962. 302 p. (MIRA 15:12)

(Automatic control)

BANIT, F.G., inzhener; VAYESHTEYN, D.M.; GOL'DFARB, Yu.M., inzhener.

Radionctive slurry gauge for rotary kilns. TSement 22 no.5:13-15
S-0 '56. (MIRA 10:1)
(Gamma rays--Industrial applications) (Kilns, Rotary)

VAYNSHTEYN, D. Ya. 111 PHASE I BOOK EXPLOITATION SOV/5411 Konferentsiya po fiziko-khimicheskim osnovam proizvodstva stali. 5th, Moscow, 1959. Fiziko-khimicheskiye osnovy proizvodstva stali; trudy konferentsii (Physicochemical Bases of Steel Making; Transactions of the Fifth Conference on the Physicochemical Bases of Steelmaking) Moscow, Metallurgizdat, 1961. 512 p. Errata slip inserted. 3,700 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A. A. Baykova. Responsible Ed.: A.M. Samarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: Ya. D. Rozentsveyg. Tech. Ed.: V. V. Mikhaylova. Card 1/16

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Physicochemical Bases of (Cont.)

SOV/5411

PURPOSE: This collection of articles is intended for engineers and technicians of metallurgical and machine-building plants, senior students of schools of higher education, staff members of design bureaus and planning institutes, and scientific research workers.

COVERAGE: The collection contains reports presented at the fifth annual convention devoted to the review of the physicochemical bases of the steelmaking process. These reports deal with problems of the mechanism and kinetics of reactions taking place in the molten metal in steelmaking furnaces. The following are also discussed: problems involved in the production of alloyed steel, the structure of the ingot, the mechanism of solidification, and the converter steelmaking process. The articles contain conclusions drawn from the results of experimental studies, and are accompanied by references of which most are Soviet.

Card 2/16

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VAYNSHTEYN, E.

Improve the disbursement operation of local budgets. Fin. SSSR
18 no.1:51-55 Ja '57. (MLRA 10:2)

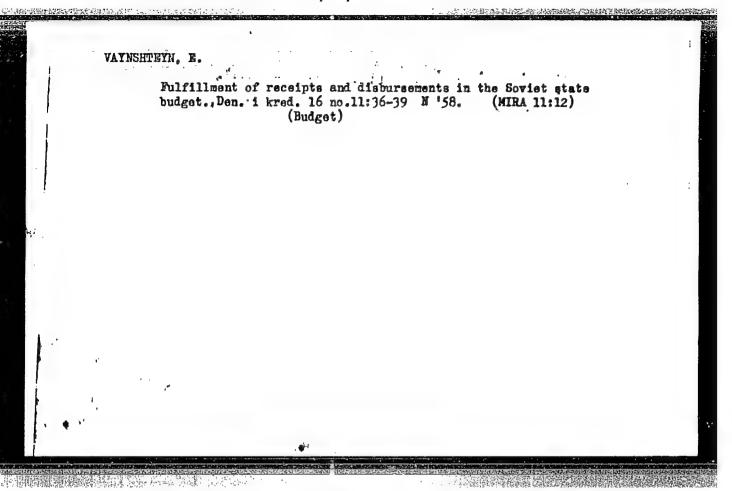
(Finance)

### VAYNSHTEYN, E.

"Collection of accounting and operational exercises in the State
Bank" by V. Shchelokov. Reviewed by E. Vainshtein. Den. 1 kred.
16 no.5:93-95 My '58.

(Banks and benking—Accounting)

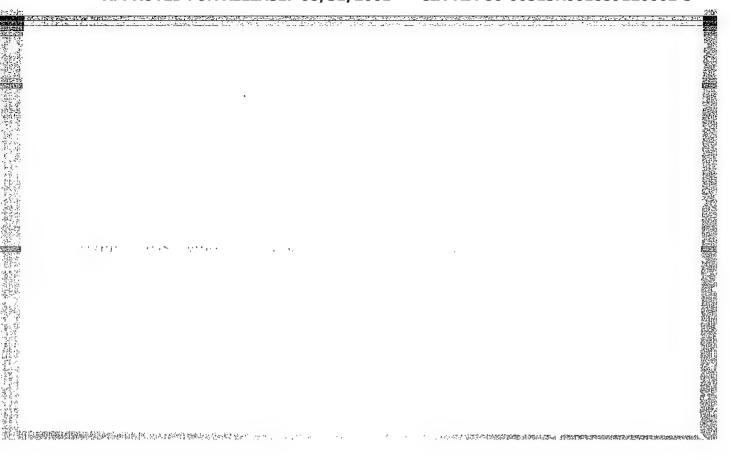
(Banks and banking-Accounting) (Shchelokov, V.)



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# VAYESHTEIN, E. A question that deserves attention. Fin. SSSR 19 no.10;42-47 0 158. (Odessa Province—Finance)

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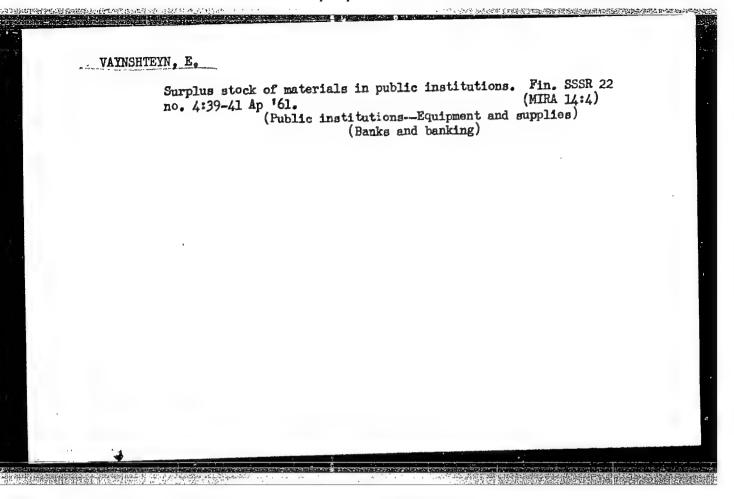
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Tl<sub>2</sub>Se·As<sub>2</sub>Se<sub>3</sub> films versus thickness and preparation technique, x-ray dosimetric and volt-ampere characteristics, kinetics and spectral distribution in the 0.5—1.5 A range of x-ray conductivity of the films were determined, as well as the quantum yield of the photoconductive effect and the energy of formation of a single electronhole pair. A vidicon-type camera tube, photoconductive in the visible and x-ray spectral regions, was constructed with a Tl2Se'As2Se3 film deposited on a beryllium face plate as a target. The first experiments with such a vidicon tube showed a short rise time (of the order of tenths of a second) of the system and the feasibility of visualization of the x-ray pictures and of measurement of the radiation intensity in different areas of the target. Orig. art. has: 8 figures and 2 tables.

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Practical training of students in State Bank branches. Den. i kred. 18 no.10:57-63 0 '60. (MIHA 13:10)

(Finance-Study and teaching)

(Banks and banking)

BERLIN, A.A.; VAYNSHTEYN, E.F.; CHERKASHIN, M.I.; MOSHKOVSKIY, Yu.Sh.

Polymers with a conjugate bond system in macromolecular chains. Part 32: Praparation and properties of 1-polyhexyne. Vysokom.soed. 5 no.9: 1354-1359 S '63. (MIRA 17:1)

1. Institut khimicheskoy fiziki AN SSSR.

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VAINSHTEYN, Eduard Grigor'yevich; YAMPOL'SKIY, Moisey Markovich;
KORNEYEVA, R., red.; LEBEDEV, A., tekhn.red.

[Issuing oredit for fixed assets] Kreditovanie zatrat v
osnovnye fondy. Moskva, Gosfinizdat, 1960. 78 p.

(Credit)

(MIRA 13:7)

VAYNSHUEYN, Eduard Grigor'yevich; KRAMAROVSKIY, D.

[Collection of problems in banking calculations] Sbornik zadach
po bankovskim vychisleniiam. Moskva, Gosizdat, 1958. 79 p.

(MIRA 13:3)

(Banks and banking--Accounting)

VAYNSHTEYN, B.K., doktor fiz.-mat.nauk

Problem of atomic structure of biological molecules. Vest.AN SSSM 30 no.12:20-26 D \*60. (MIRA 13:12) (Biochemistry) (Atoms)

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VayNEHTEYN, E.O.

USSR/ Analytical Chemistry. Analysis of Inorganic G-2 Substances.

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27141.

Author : E.O. Vaynshteyn, V.V. Korolev.

Title : Spectral Determination of Sodium and Potassium

in Silicate Rocks.

Orig Pub: Zh. analit. khimii, 1956, 11, No. 5, 627 - 633.

Abstract: The sample is mixed with LigCog, CuO and charcoal

powder in the ratio of 1:0.5:1:1.5 and packed in the carbon electrode. The spectra are excited in an alternating current arc at 5 a and photographed with the spectrograph ISP-51 on "Infrachrom-840" plates. The analytical lines are: Na - 8194, 8183; K - 7664, 7696, and Li - 8126 A. The graphs are plotted on co-ordinates  $\triangle$ S and log0; in case of concentration greater

Card 1/2

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USSR/Analytical Chemistry. Analysis of Inorganic G-2 Substances.

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27141.

than %, they are plotted on co-ordinates line width and logC. The width of a line is determined as the difference between two readings on the barrel of the micrometric screw of the photometer corresponding to two points of the line, the blackening of which is equal to the blackening of the comparison line. The error of the analysis does not depend on the gross composition of samples and is 4 to 5%.

Card 2/2

VAYNSHTEYN, E.S.; CHERNOSVITOV, Yu.L., nauchnyy red.; NEMANOVA, G.F., red. izd-va; BYKOVA, V.V., tekhn. red.

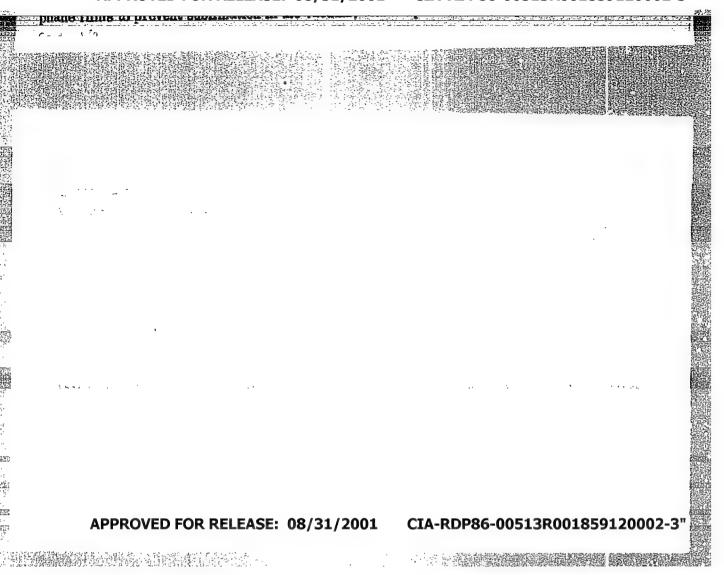
[Industry's requirements as to quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos. nauchno-tekhn. izd-vo litry po geol. i okhrane nedr. No.48. [Natural colors (mineral pigments)] Prirodnoe krasochnoe syr'e (Zemlianye pigmenty). Nauchn. red. IU.L. Chernosvitov. 1961. 30 p. (MIRA 14:11)

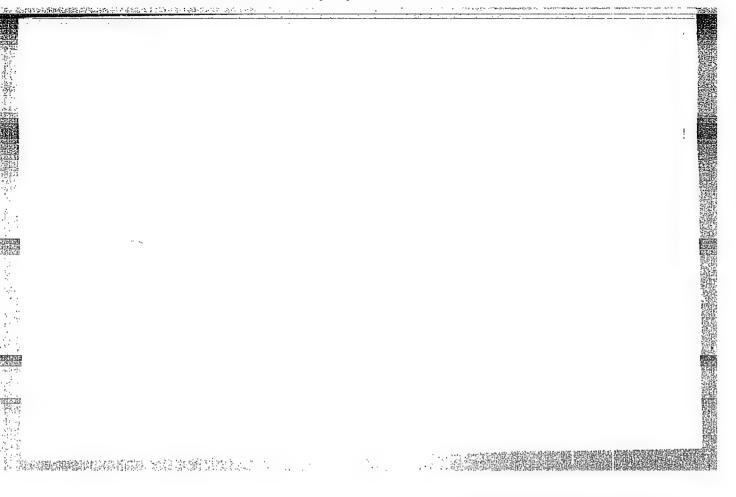
VAYNSHTEYN, Emmanuil Solomonovich; KENINA, L.P.., red. izd-va; SHMAKOVA, T.M., tekhn. red.

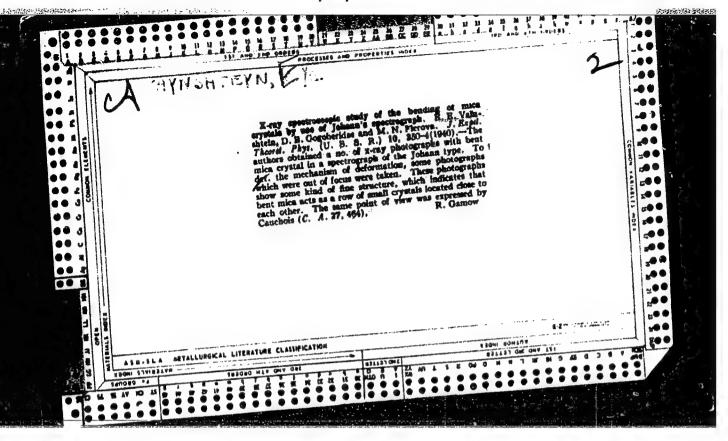
[Natural pigments] Prirodnye pigmenty. Moskva, Gosgeoltekh-izdat, 1962. 20 p. (MIRA 16:6)

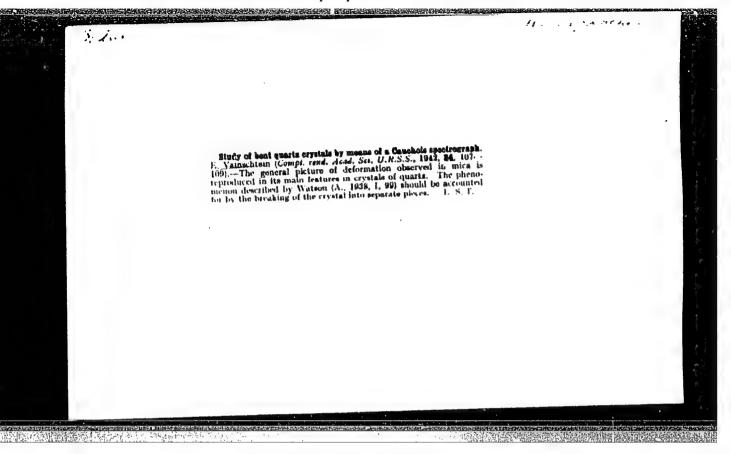
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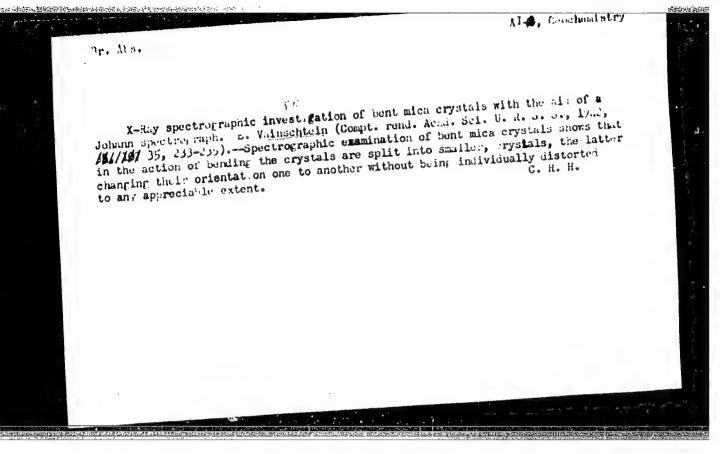






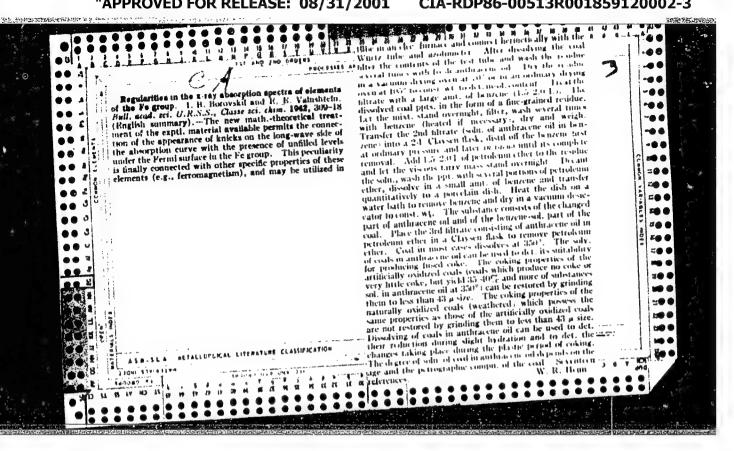
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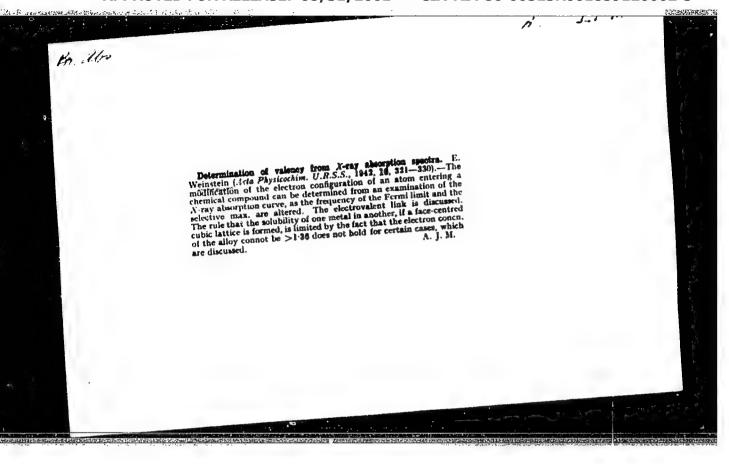
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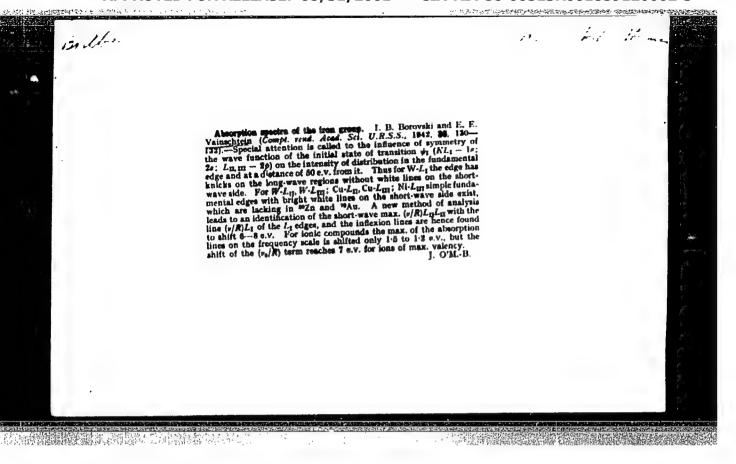


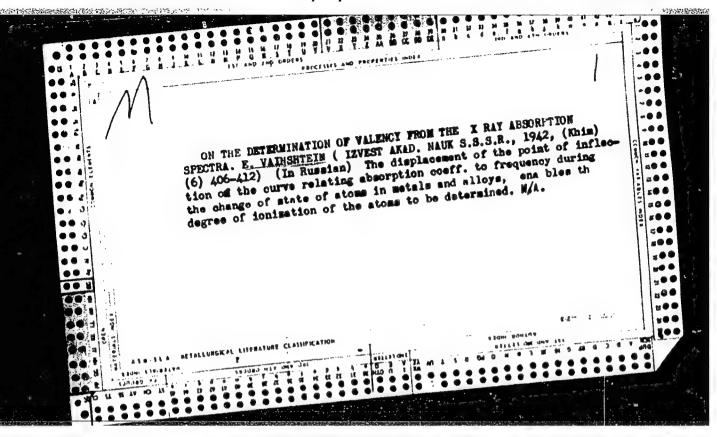
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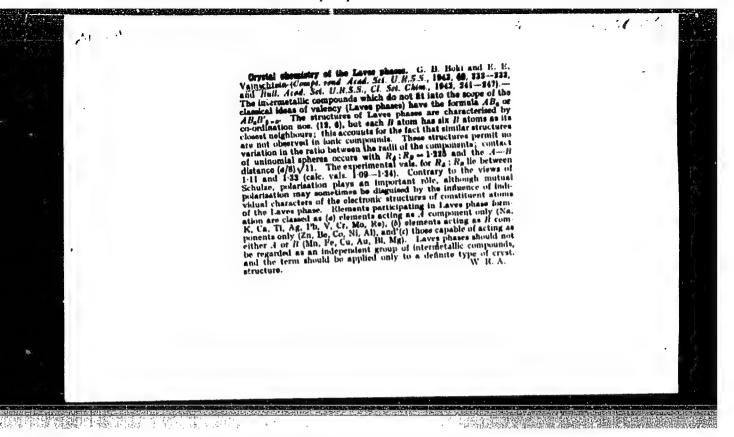
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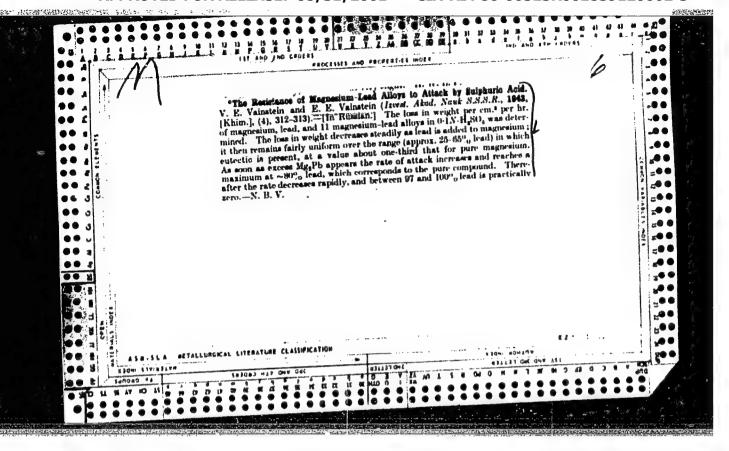


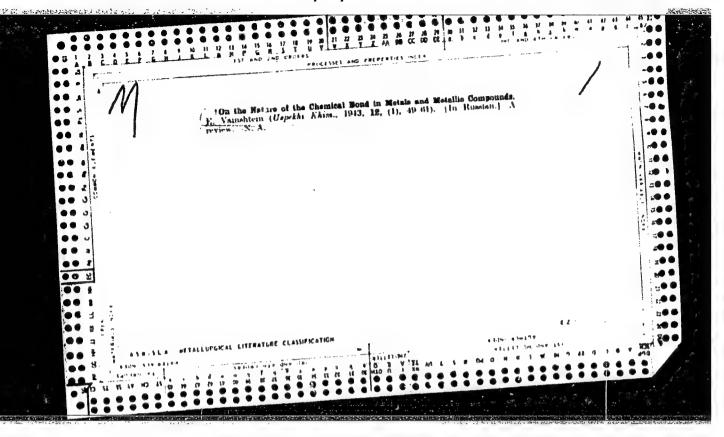


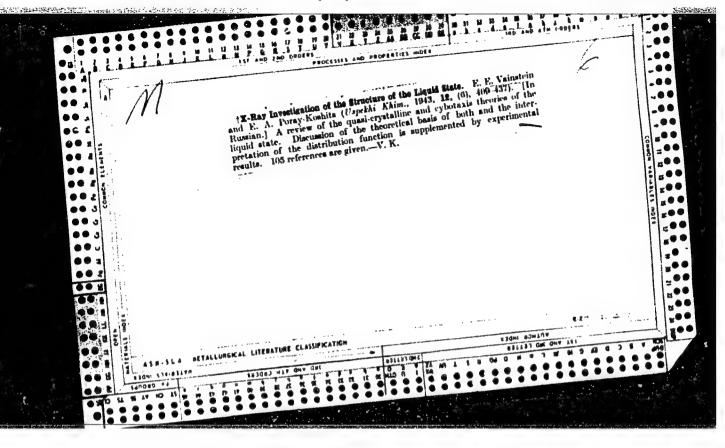


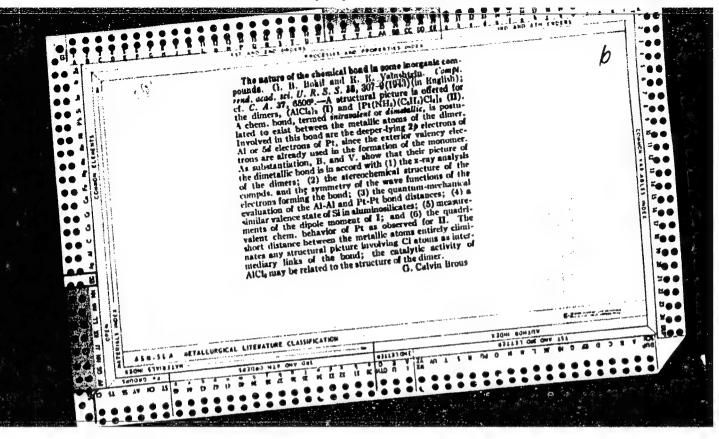


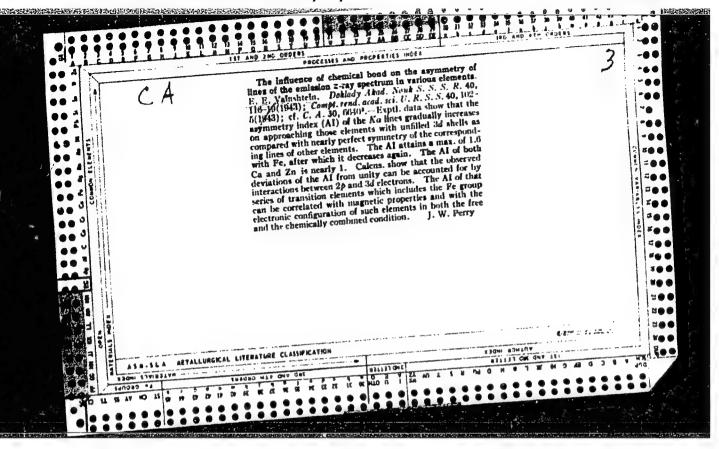


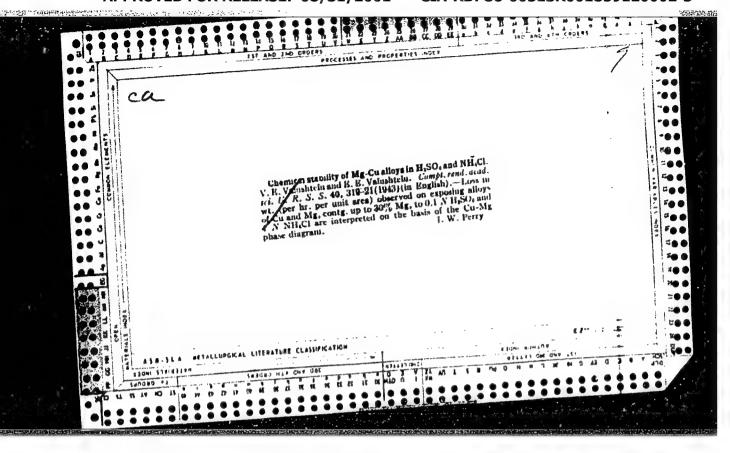


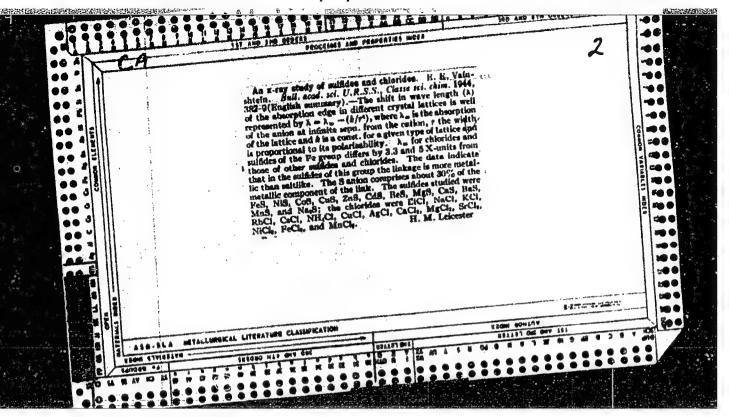


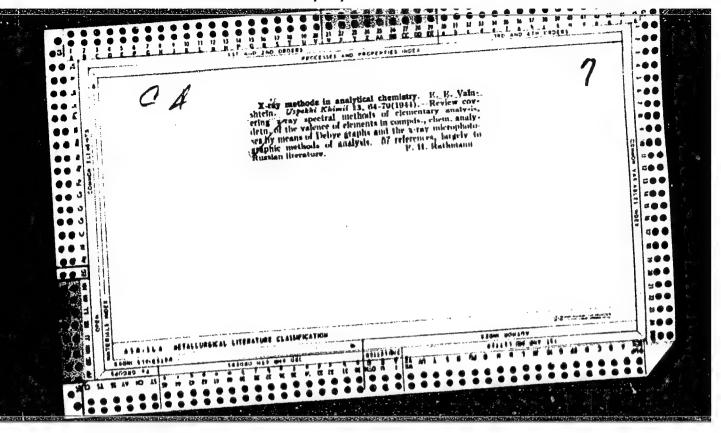


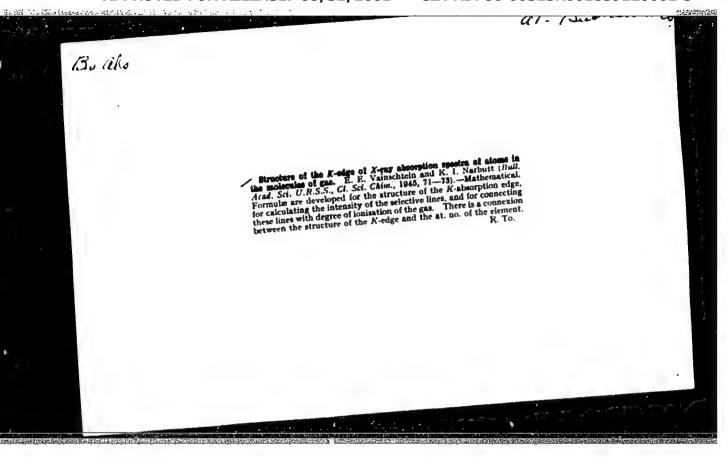








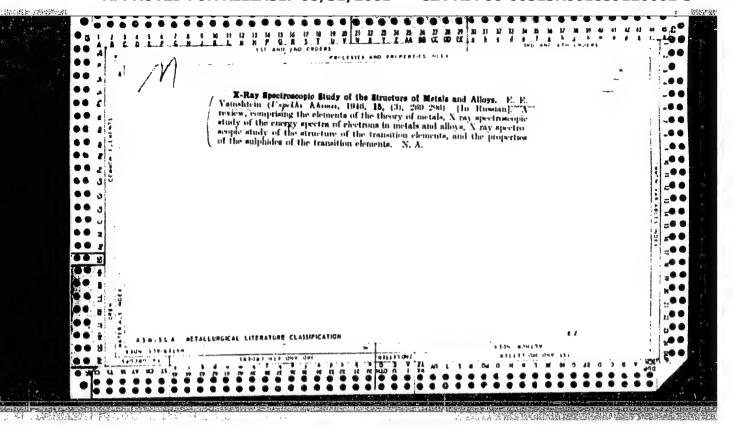




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VAYNSHTEYN. F. YE.	PA 34T65
VAYNSHTEYN, VE.	USSR/Muclear Physics - Neutrons, Thermal Jul 1946 Muclear Physics - Neutrons - Diffusion  "Dispersion of Thermal Neutrons in Metals," E. Ye.  "Prirode" No 7  Author gives a brief summary of the work which was undertaken by various American scientists after Whitaker and the physical dimensions of the solid bodies. He gives a brief description of the results of X-ray and electronographic observations which were conducted on the dispersion of neutrons in metals.  ID  USSR/Faclear Physics - Neutrons, Thermal (Contd)  Among the scientists mentioned are Nix, Dunning, and Clement.
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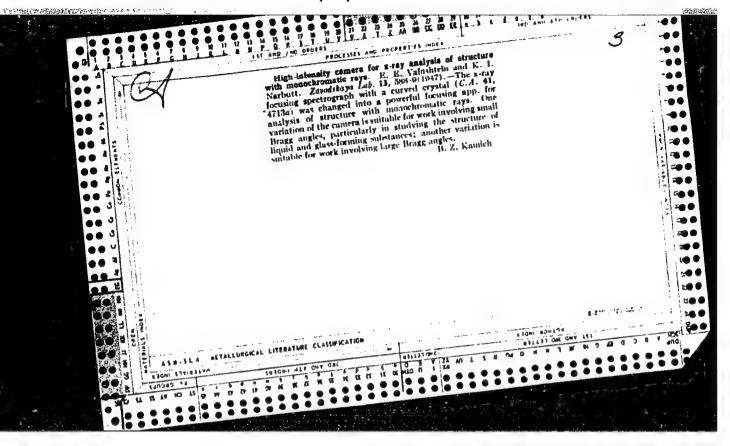
USSR/Physics Spectographs I-rays - Application Sep 1946

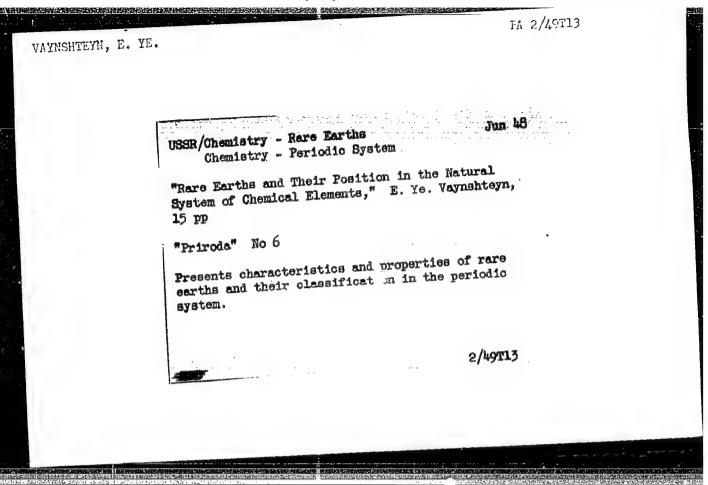
"A New Type of X-ray Focusing Spectrograph with a Curved Crystal," E.F. Veynshteyn, K.I. Narbutt, Laboratory of Geochemical Problems and X-ray Chemical Laboratory, imeni V. I. Vernadskiy, Institute of Geological Sciences, Academy of Sciences of the USSR, 4 pp

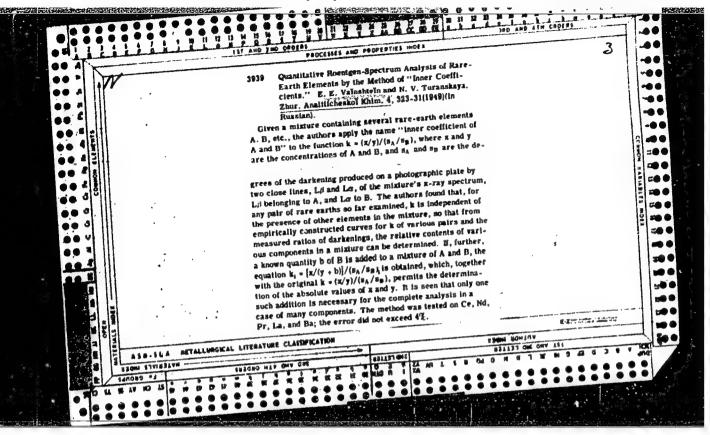
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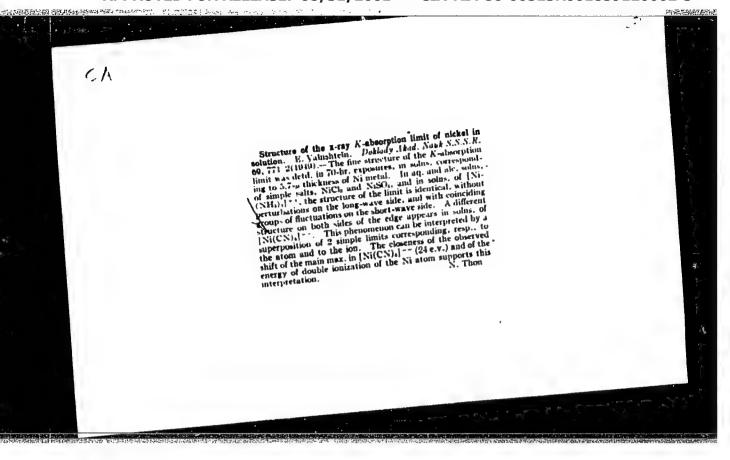
A description is given of an improved type of spectrograph obeying more closely the equation for the resulting intensity of the scattered wave in an arbitrary point of observation.

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	\$00/2809		trudy soweshchanija lutions; Transactions of  } Moscow, Izd-vo AN SSSR,	Ed. of P	sts, and	COVERAGE: This collection of papers was originally presented at the Conference on Thermodynamics and Structure of Solutions sponsored by the Section of Chemical Salances of the Academy of Solutions, USS, and the Department of Chemistry of Moncow State University, and the Department of Chemistry of Moncow State University, and boild in Moscow on January 27-30, 1958, Oriticars of the conference are Linked in the Poreword, A list of other reports	also read at the conference, but not included in this book, rare given. Asong the problems treated in this work are: electrolytic solutions, ultrasonic measurement, distoctric and thermodynamic properties of various structures, spectroman the structures, etc. Maferences accommy individual stricted as	lutions	ns of the Mnery	Use in	2. 2.1d -	Zezes in	d farfeal	edy of	eras	4.5		a	The second second
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Vaynahteyn, E. Ye., Kotlyar, B. I.,

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Shapiro, G. A.

TITLE:

Investigation of the Fine Structure of X-ray Absorption Spectra of Iron in Some Antiferromagnetics and Ferrites (Issledovaniya tonkoy struktury rentgenovskikh spektrov pogloshoheniya zheleza v nekotorykh antiferromagnetikakh i ferritakh)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 1, pp 55-58 (USSR)

ABSTRACT:

In the authors' opinion this is the first experimental investigation into the subject given in the title. The purpose is to clarify the direction and the magnitude of the variations in the fine structure of X-ray-K-absorption spectra of iron in antiferromagnetics and ferrites. These variations are related to those occurring in the magnetic state of the said substances. A further aim is that of finding ways for the most suitable development of these investigations. The antiferromagnetic modification of iron oxide  $(\alpha\text{-Fe}_2\text{O}_3)$  and the

Card 1/4

group of ferrites Ni, Co, Mn, Sr and Zn were selected for the experiment. The authors used a focusing X-ray spectrograph

Investigation of the Fine Structure of X-ray Absorption Spectra of Iron in Some Antiferromagnetics and Ferrites 507/20-125-1-13/67

of the logann type. Some of the spectra of a-Fe<sub>2</sub>0, and MnO.Fe203 recorded in this way are illustrated in 2 diagrams. A remarkable (almost treble for iron oxide and double for MnO.Fe Oz) change of absorber thickness influences but very little the relative intensity of the longwave range in the absorption spectrum of iron in these compounds, leads, however, to an impoverishment in the fluctuations and to a distortion of the true ratio of their intensities at the shortwave side of the absorption limit. It was found by a similar series of experiments that the optimum density of the absorber corresponds to the density 5 mg/cm2. Two further diagrams show the group of the absorption edges of iron in various compounds and the absorption edge of iron in iron ferrite and iron oxide. The following provisional conclusions were drawn from the experimental data: 1) the wavelength of the first absorption maximum and the position of the center of the absorption edge of iron in a-Fe<sub>2</sub>0<sub>3</sub> in the ferrites investigated practically do not depend on the magnetic state of the substance.

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group of the ferrites investigated the said wavelength also does not depend on the nature of the bivalent metal. 2) The ordered distribution of the electron spins in the antiferromagnetic lowers the relative intensity of the longwave range in the absorption spectrum of the transition metal, as compared to the paramagnetic or ferromagnetic state of the substance.

3) At the shortwave side of the X-ray absorption spectra of all ferrites investigated here a more or less clearly marked fine structure was observed. 4) These conclusions are merely of a provisional nature and must therefore be substantiated by further purposive and systematic experiments. Some of these are being carried out at present in the authors' laboratory. There are 4 figures and 12 references, 5 of which are Soviet.

ASSOCIATION:

Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the Academy of Sciences, USSR) Odesskiy pedagogicheskiy Institut im.

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Investigation of the Fine Structure of X-ray Absorption Spectra of Iron in Some Antiferro-magnetics and Ferrites

SOV/20-125-1-13/67

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Card 4/4

# VAYNSHTEYN, E. Ye.

"X-Ray-Spectroscopic Investigation of the Structure of Solids." Thesis for degree of Dr. Physico-Mathematical Sci. Sub 27 Feb 50, Physics Inst imeni P. N. Lebedev, Acad Sci

Summary 71, 4 Sep 52, <u>Dissertations Presented</u>
for Degrees in Science and Engineering in Moscow
in 1950. From <u>Vechernyaya</u> Moskva, Jan-Dec 1950.

24(4)

SOV/1508 PHASE I BOOK EXPLOITATION

Vaynshteyn, E. Ye.

- Rentgenovskiye spektry atomov v molekulakh khimicheskikh soyedineniy i v splavakh (X-Ray Spectra of Atoms in Molecules of Chemical Compounds and In Alloys) Moscow, Izd-vo AN SSSR, 1950. 206 p. 4,000 copies printed.
  - Sponsoring Agency: Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii.
  - Resp. Ed.: A.P. Vinogradov, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: L.L. Razumova; Tech. Ed: N.A. Nevrayeva.
  - PURPOSE: This book is intended for specialists who use the methods of X-ray spectrography for research in physics and physical chemistry.

COVERAGE: This book presents a survey of achievements in the

Card 1#

X-Ray Spectra of Atoms (Cont.)

SOV/1508

field of X-ray spectroscopy as it is applied in the structural analysis of chemical compounds, metals, and alloys. A systematic review is given of Soviet and foreign experimental data. Research methods and fundamental theoretical concepts are also included. Much attention is given to transition elements, especially the iron group, due to the great practical and theoretical interest in these Certain difficult aspects of X-ray spectrography which belong to the larger group of theoretical and experimental problems of the so called "satellite" lines are not included in this text. Bright prospects are seen for the application of X-ray spectrography to metallography. The author consulted the following persons: N.V. Ageyev, Corresponding Member of the AS USSR; Professors I.B. Borovskiy and G.B. Bokiy, and K.I. Narbutt and R.A. Borinskiy. There are 133 references, 96 of which are Soviet, 33 English, and 4 German.

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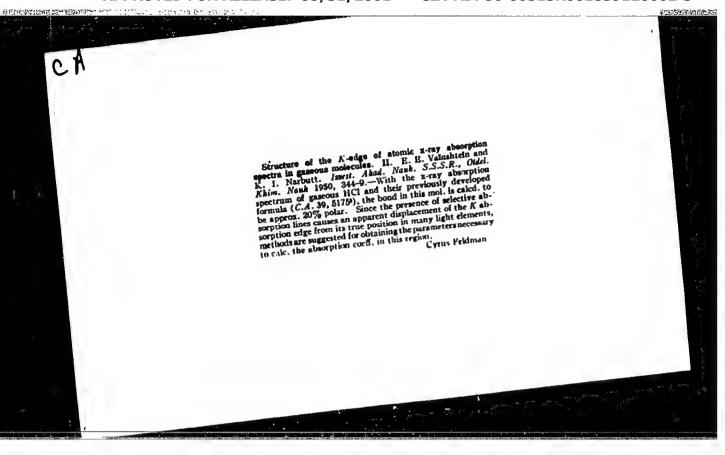
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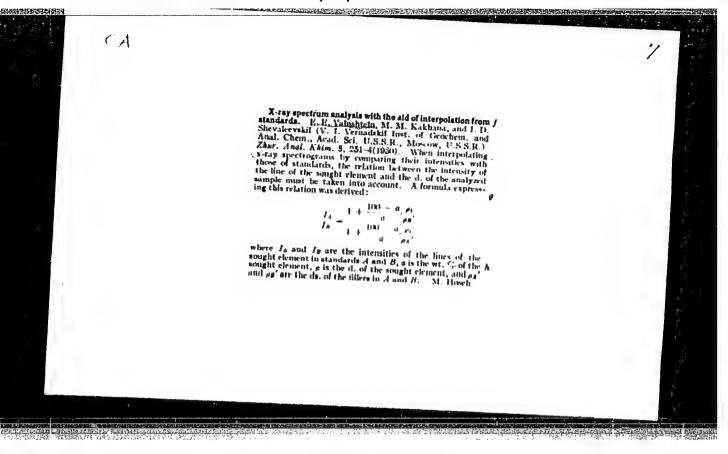
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VAYNSHTEYS E. YE.

USSR/Physics - X-Ray Analysis

Aug 50

"Optimum Thickness of Absorbent for X-Ray Absorption Spectra," E. Ye. Vaynshteyn, Inst of Geochem and Anal Chem, Acad Sci USSR

"Zavod Lab" Vol XVI, No 8, pp 962-964

Studies problem of calculating on optimum thickness of absorbent in general form for binary alloys. Considers only investigations conducted with aid of photographic method for registering spectra, with their subsequent microphotometering.

169r89

VAYNSHTEYN, E. YE.

PA 160T103

USSR/Physics - Nickel Compounds X-Ray Spectra May 50

"Form of X-Ray Kal, 2 -Lines of Nickel Atoms in Very Simple Chemical Compounds, III," E. Ye. Vaynshteyn, Inst of Geochem and Anal Chem, Acad Sci USSR, 4 pp

"Zhur Eksper i Teoret Fiz" Vol XX, No 5

Experimentally investigates form and width of X-ray apectral Kal, 2 -lines of nickel oxides and sulfides (NiSO<sub>4</sub>, NiO, Ni<sub>2</sub>O<sub>3</sub>, NiS, Ni<sub>3</sub>S<sub>4</sub>). Shows index of asymmetry of lines to be dependent on method of preparing oxides. Proposes new explanation of this asymmetry. Submitted 12 Nov 49.

160T103

VAYNSHTEYN, E. Ye.

PA 160T102

USSR/Physics - Nickel Alloys X-Ray Spectra May 50

"Form of the X-Ray Kal, 2 -Lines of Cu and Ni Atoms in Alloys of the System: Ni--Cu, IV," E. Ye. Vaynahteyn, Inst of Geochem and Anal Chem, Acad Sci USSR, 5 pp

"Zhur Eksper i Teoret Fiz" Vol XX, No 5

Experimentally investigates form and width of X-ray Ka<sub>1,2</sub>-lines of Ni and Cu in Ni--Cu alloys. Results obtained are connected with structure of atoms in alloy lattice. Studies form of Ka<sub>1,2</sub>-lines of Ni and Cu alloys in para- and ferromagnetic states. Submitted 12 Nov 49.

## "APPROVED FOR RELEASE: 08/31/2001

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VAYNSHTEYN, E. 155178 are different in atoms differing in degree of ionization. pearing because of transitions of the K-electron tion of two (or more) individual edges, each aption edge of atoms in metal must be superposiray absorption. Structure of principal absorpmust unavoidably complicate the process of K-"Dok Ak Nauk SSSR" Vol LXX, No 1 "Structure of the Principal K-Absorption Edge tinuous energies into free optical levels which of the atom of given type in the region of contion elements in metallic lattices and alloys peculiarities in behavior of atoms of transi-Mi-Al alloys show elements of transition groups X-ray emission lines of Ni and Cu in Ni-Cu and Recent studies of form and structure of several imeni V. I. Vernadskiy, Acad Sci USSR, 3 pp of Atoms of Transition Elements in Metals," USSR/Physics - Metals, Structure (Contd) lattices of pure metals and alloys. These in different states of ionization can exist in E. Vaynshteyn, Inst of Geochem and Anal Chem USSR/Physics - Metals, Structure Submitted by Acad S. Elements, Transition I. Vavilov Jan 50

VAYNSHTEYN, E. Ye.

USSR/Chemistry - X-Ray Spectrography Nov/Dec 51

"One Means for Eliminating Focusing Error and Increasing Radiation Intensity of the Cauchois Type Spectrograph," A. V. Pivovarov, E. Ye. Vaynshteyn, Kazakh State U; Inst of Geochem and Analyt Chemimeni V. I. Vernadskiy, Acad Sci USSR

"Zhur Analit Khim" Vol VI, No 6, pp 386, 387

Authors describe method and apparatus for bending of crystal of X-ray spectrograph which increase radiation intensity and accuracy of spectfograph. They state that same principle was used for design of new spectrograph RSK-3 of high radiation intensity.

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PA 195T35